

Appln. No. 10/607,143
Amendment

REMARKS

In response to the Office Action (Final) mailed March 15, 2006, reconsideration and allowance of Applicants' claims are respectfully requested. Claims 1, 7, and 8 are pending in the application. Claims 1 and 7 have been amended. Claims 2-6 have been canceled, with the subject matter from these claims incorporated into independent claim 1. Claim 7 has been amended solely to keep the dependency consistent with the amendments to claim 1. Claim 8 remains as originally presented.

Although no fee is believed to be due in association with the instant response to the Office Action, the Office is authorized to charge any required fees to Deposit Account 50-0958.

Prior Art Rejections

Claims 1-5 and 7-8 were rejected under 35 U.S.C. 102(b) as being anticipated by Husain et al. (U.S. 6,361,695). Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Husain et al. (U.S. 6,361,695) in view of Wang et al. (US 5,275,732). Amended claim 1, which includes the subject matter of canceled claims 2 through 6, defines allowable subject matter. More specifically, claim 1 requires, *inter alia*, "means for collection of the foam from the tank and feedback thereof to the bioreactor."

Regarding the requirement for "means for collection of the foam from the tank and *feedback thereof to the bioreactor*," the prior art, either combined or taken singly, fails to teach or suggest this limitation. The Office Action states, "It would have been obvious to one ordinarily skilled in the art at the time of the invention to have the foam collection/recycle means of Wang et al. in the invention of Husain, since Wang et al. teaches the benefit of treating effluents that

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discharge into the air and because Husain desires the minimization of foam. Applicants respectfully traverse this rejection.

The language "means for collection of the foam from the tank and feedback thereof to the bioreactor," require a means for collection of foam from the tank, as well as feedback of foam to the bioreactor. The prior art references to Husain et al. and Wang et al. do not teach or suggest feedback of foam to the bioreactor. As admitted by the Examiner in paragraph 4 of the Office Action, Husain et al. does not teach the collection of foam from the tank and feedback thereof to the bioreactor. The Examiner states that the secondary reference Wang et al. teaches these limitations. Applicants respectfully disagree. Column 8 line 1 and column 10 lines 48-64 of Wang et al. teach foam collection means. However, Wang does not teach or suggest the requirement for feedback of foam to the bioreactor. Column 8 lines 30-45 of Wang et al. teach that gas is recycled -- not foam as required. In fact, Wang et al. teaches that the collected foam is wasted. See column 10 lines 63-64. The wasting of the foam is contrary to the Applicants' invention. Paragraphs [0014] and [0019] in Applicants' written description disclose that the condensed foam is recycled back to the bioreactor. The recycling arrangement for foam is illustrated in Applicants' Figure 2. Applicants' invention promotes the reuse of foam, whereas Wang et al. teaches discarding foam. Consequently, Wang et al. teaches away from the applicant's invention, and the combination of Husain et al. and Wang et al. is improper.

Even assuming arguendo, that Wang et al. did teach the requirement for the feedback of foam to the bioreactor, the combination of Husain et al. in view of Wang et al. would not have been obvious to one of ordinary skill in the art. In other words, given the teaching of Husain et al., one of ordinary skill in the art would not look to Wang et al., for providing a foam collection means. Column 6 lines 46-49 of Husain teach the desire to minimize foam. Amended claim 1

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requires the collecting and recycling of foam. Husain et al., which includes structure to minimize and eliminate foam, teaches away from collecting and recycling. Consequently, given a structure that minimizes and eliminates foam, it would not have been obvious to one of ordinary skill in the art to collect and recycle foam.

Claim 1 also requires, *inter alia*, "plumbing means for establishing different operational modes involving said treating of the wastewater, said discharging of the clean effluent separately from said discharging of the sludge concentrate." In the Office Action, the Examiner states that Husain et al. teaches this limitation because Husain et al.'s plumbing means has the ability to discharge the clean effluent overboard separately of the discharging of the sludge concentrate "because such occurs at different times." Applicants respectfully disagree.

Applicants' claim 1 is written in means-plus-function format. In interpreting a mean-plus-function claim, the Office may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination. *M.P.E.P* 2181. As per Applicants' specification, the "plumbing means" recited in Applicants' claim 1 requires structure for discharging the sludge from the bioreactor through an outlet line having no connection to the overboard discharge of the clean effluent, downstream of the bioreactor. Husain et al. does not teach an inlet line having no connection to the overboard discharge of the clean effluent, downstream of the bioreactor. In fact, Figure 1 of Husain et al. teaches that the discharge lines are connected downstream of the bioreactor. Consequently, Husain et al. does not teach or suggests the claimed structure, as asserted in the Office Action.

Claims 7 and 8, which depend from independent claim 1 are also allowable over the prior art. Claims 7 and 8 incorporate the limitations of claim 1 and also add additional elements that further distinguish Husain et al. and Wang et al.

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Conclusion

In view of the foregoing remarks, Applicants respectfully request reconsideration of this application, withdrawal of all rejections, and the timely allowance of all pending claims. Should the Examiner feel that there are issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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